

### **REMARKS**

By this amendment no claims have been amended, cancelled, or added. No new matter has been added. Accordingly, claims 1-11, 48-54, 56-61, 71-83, 85-98, and 101-121 remain pending in this reissue application. Applicant requests the timely reexamination and allowance of this reissue application.

#### **Interview Summaries**

Applicant would like to thank Examiner Hurley for the courtesy of the telephonic interviews conducted on August 22, 2008 ("the first interview") and August 28, 2008 ("the second interview"). During the first interview, Applicant's undersigned representative asked for clarification regarding the rejection set forth in the Office Action stating that the reissue declaration filed with the application was defective. During the first interview, Applicant's undersigned representative proposed a new error statement, which was submitted to Examiner Hurley, for review, on August 25, 2008 via facsimile. During the second interview, Examiner Hurley discussed the proposed new error statement and provided Applicant's undersigned representative, via facsimile, a revised proposed error statement. Applicant files herewith a Revised Reissue Declaration in accordance with the revised proposed error statement provided by Examiner Hurley.

#### **Information Disclosure Statement**

Applicant submitted in the Information Disclosure Statement filed July 1, 2004 the European Search Report for EP Application No. 99 117449 dated February 6, 2003. The Search Report was also listed on the Form PTO 1449 submitted therewith. Upon review of the copy of the signed Form PTO 1449 previously returned to Applicant, Applicant noticed that the Search Report was not initialed by the Examiner. Applicant

requests that the Examiner initial the Search Report listed on the Form PTO 1449 indicating that it has been considered by the Examiner. Applicant also requests that a copy of the Form PTO 1449 with the initialed Search Report be returned to the Applicant.

#### **Examiner's Comment**

In the Office Action mailed March 17, 2008 ("the Office Action"), the Examiner requested that the Applicant submit an all encompassing amendment listing all pending claims, indicating which claims have been cancelled, and all changes to the specification. Applicant includes as an attachment to this Reply, a Prosecution Summary, summarizing the various amendments to the claims and specification. All of the changes are shown with respect to the issued patent (U.S. 6,286,615 B1). Amendments to the issued claims and specification are shown with brackets and/or underlines, as appropriate. Each issued claim that was amended in this reissue application is identified as "amended" and each issued claim that was not amended in this reissue application is identified as "issued." The pending new claims, i.e., the remaining, non-cancelled claims that were newly added with respect to the issued claims in this reissue application, reflect their latest amendment and are underlined. To be consistent with reissue amendment practice, each new claim, whether or not it was subsequently amended in this reissue application, is identified as "new" to show the changes, i.e., the new claims, with respect to the issued patent. See M.P.E.P §§ 1453(IV) and 1453(V)(D).

Applicant believes the Prosecution Summary to be an accurate representation of the amendments made to the claims and specification of the issued patent during

prosecution of this reissue application. Applicant, however, respectfully notes that the Prosecution Summary is merely a listing of the amendments already made during prosecution, as well as the amendment to the title made herein, and is not, itself, an amendment. Additionally, Applicant reserves the right to present relevant facts regarding the accuracy of the Prosecution Summary, should it be necessary.

### **Reissue Oath/Declaration**

In the Office Action, claims 1-11, 48-54, 56-61, 71-83, 85-98, and 101-121 were rejected as being based upon a defective reissue declaration under 35 U.S.C. § 251. The originally filed reissue oath/declaration filed with this application on December 22, 2003 was noted in the Office Action as being defective because in paragraph 4 thereof Applicant acknowledged that the duty to disclose information was material to the “examination” of this application instead of acknowledging that the duty to disclose information was material to the patentability of this application. Additionally, the originally filed reissue oath/declaration was noted in the Office Action as also being defective because the statement of error was alleged to be unclear. As set forth above, Applicant’s undersigned representative discussed the reissue declaration with Examiner Hurley during the first and second interviews. In accordance therewith, Applicant files herewith a Revised Reissue Declaration, and submits that it is in compliance with 37 C.F.R. 1.175(b)(1). Accordingly, Applicant requests that the Revised Reissue Declaration be accepted and the rejection under 35 U.S.C. § 251 be withdrawn.

### **Conclusion**

In view of the above, Applicant respectfully submits that pending claims 1-11, 48-54, 56-61, 71-83, 85-98, and 101-121 are in condition for allowance. Accordingly,

Applicant respectfully requests reconsideration and reexamination of this reissue application and timely allowance of the pending claims.

The Office Action contains characterizations of the claims with which Applicant does not necessarily agree. Unless expressly noted otherwise, Applicant declines to subscribe to any statement or characterization of the Office Action.

If the Examiner believes a telephone conversation might advance prosecution, the Examiner is invited to call Applicant's undersigned representative at 202-408-4397.

Please grant any additional extensions of time required to enter this response and charge any additional required fees to our Deposit Account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: September 17, 2008

By: 

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**Prosecution Summary**

**Specification:**

Title: (As Amended Herein) [HEAVY] VEHICLE [FOR BREAKING UP GROUND]  
WITH [RETRACTING] RETRACTABLE AND [STEERING] STEERABLE REAR  
[WHEELS] WHEEL

Paragraph at lines 1-9 of column 4 (Previously Amended):

It can be seen in FIG. 7 that the first and third hydraulic jacks or first actuator 9 and third actuator 27, respectively, are supplied by the pressurized oil distribution circuit generally indicated by 30, i.e., a control circuit. This includes a first slide valve 31 piloted by solenoid valves 31' and 31" that supply the first hydraulic jack 9 and by a third slide valve 32 that is controlled by the steering column or maneuvering system 10 of the machine, which supplies the third hydraulic jack or third actuator 27.

**Claims:**

1. (Amended) A steerable machine for breaking up ground comprising:

a frame;

at least one pair of rollable front supports and at least one pair of rollable rear supports, each of said front and rear supports including a chassis secured to the frame and said front supports being rotatable about a front vertical axis and at least one of the rear supports being [pivotal] rotatable about a rear vertical axis;

said chassis includes a yoke that supports said rear support, and has a vertical pivot journal coupled to revolve on a support plate fixed to an end of a second actuator;

said second actuator comprises a second hydraulic jack set with a vertical axis, which has a second rod with a second rod end fixed to said plate and a second cylinder end, wherein said rod slides, integral with said frame;

the cylinder of said second hydraulic jack is an integral part of said frame being connected thereto by means of a first articulation for moving said chassis with respect to a fixed point on said frame in order to move the rear [rotatable] support inward of said frame;

at least one driver's cab located in said frame;

a means for breaking up the ground connected to said frame;

traction means supported by said frame for rotating at least one of said [rotatable] rollable supports;

at least one first actuator operatively coupled to the rear supports;

a maneuvering system accessible from said driver's cab for operating the actuator for rotating said rear supports about the rear vertical axis while turning the front supports of the machine.

2. (Issued) The machine according to claim 1, wherein:

said first actuator comprises a first hydraulic jack having a first rod with a first rod end fixed to said yoke and a first cylinder end,  
wherein said rod slides, fixed to said plate.

3. (Issued) The machine according to claim 1, wherein:

the chassis of said front supports are interlinked by means of a second articulation, at least one of said chassis cooperating with a third actuator for rotating the chassis around a vertical axis.

4. (Issued) The machine according to claim 3, wherein:

said third actuator comprises a third hydraulic having a third rod with a third rod end pivoted to said chassis of said front support and a third cylinder end,  
wherein said rod slides, pivoted on said frame.

5. (Issued) The machine according to claim 1, wherein:

said jacks comprise hydraulic two-way jacks connected to a distribution circuit of oil under pressure.

6. (Issued) The machine according to claim 5, wherein:  
said distribution circuit comprises:  
a first slide valve piloted by solenoid valves that supply said first hydraulic jack;  
a third slide valve controlled by said maneuvering system of said machine that  
supply said third hydraulic jack;  
a first position detector cooperating with said first hydraulic jack;  
a third position detector cooperating with said third hydraulic jack;  
an electronic control unit electrically coupled to said position detectors, to said  
position signal and to said solenoid valves of said first slide valve.

7. (Issued) The machine according to claim 6, wherein:  
said position detectors comprise potentiometric detectors.

8. (Issued) The machine according to claim 6, further comprising:  
a position signal of said rear wheel or track, said position signal comprising a  
travel switch being wired to said electronic control unit.

9. (Issued) A steerable machine for breaking up ground comprising:  
a frame;  
at least one pair of rollable front supports, said front supports being rotatable  
about a front vertical axis and front steering means controlled by power steering for  
steering said front supports;



at least one pair of rollable rear supports, said rear supports being pivotable about a rear vertical axis and rear steering means controlled by at least one steering hydraulic cylinder for steering said rear supports;

at least one driver's cab located in said frame;

a means for breaking up the ground connected to said frame;

traction means supported by said frame for rotating at least one of said rollable supports;

a maneuvering system accessible from said driver's cab for operating said front steering means and said rear steering means at the same time, from said driver's cab.

10. (Issued) The steerable machine for breaking up ground as claimed in claim 9, wherein:

said front steering means is comprised of a second actuator having a hydraulic steering cylinder supplied by slide valves for working with said front supports;

said rear steering means is comprised of a first actuator having a steering hydraulic cylinder supplied by slide valves for working with said rear supports;

said power steering of said front steering means is connected to a steering wheel in said driver's cab and controls said slide valves;

said solenoid valves of said rear steering means control said slide valves; and

said maneuvering system having a control means interlinking said steering hydraulic cylinders, and controlling coordinated turning of both said front supports and said rear supports.

11. (Issued) The steerable machine for breaking up ground as claimed in claim 10, wherein:

said control means further comprises potentiometric position detectors in mechanical connection with each steering hydraulic cylinder, and electrically connected to an electronic control unit.

12-47. (Canceled).

48. (New) A machine for breaking up ground comprising:  
a frame;  
at least a first and second rollable front support;  
at least a first and second rollable rear support, at least the first rear  
support being pivotable about a vertical axis between a retracted position and an  
extended position with respect to the frame;  
at least one driver's cab located in said frame;  
a ground breaking device coupled to the frame and configured to contact  
the ground;  
a traction system coupled to the frame and configured to rotate at least  
one of said rollable supports; and  
a steering system controllable from said driver's cab and configured to  
selectively steer the front supports and at least the first rear support at the same time,  
the steering system including

at least one rear hydraulic actuator configured to steer the first rear support,

at least one front hydraulic actuator configured to steer at least one of the first and second front supports, and

an electronic control unit configured to coordinate movement of the at least one rear and at least one front hydraulic actuators.

49. (New) A machine according to claim 48, wherein the steering system further includes a first position detector operatively coupled to at least one of the first and second front supports, and a second position detector operatively coupled to at least the first rear support, the electronic control unit configured to electronically communicate with each of the first and second position detectors.

50. (New) A machine according to claim 49, wherein the steering system further includes a third position detector configured to determine whether the first rear support is in the retracted position, the third position detector including a travel switch.

51. (New) A machine according to claim 48, wherein the steering system further includes a plurality of position detectors, the electronic control unit configured to coordinate movement of the at least one rear and at least one front hydraulic actuators in response to signals received from the plurality of position detectors.

52. (New) A machine according to claim 48, wherein the first rear support is steerable in both the extended and retracted positions.

53. (New) A machine according to claim 48, wherein the first rear support is steerable according to a calculated geometry with respect to a common center of steering rotation of the front supports.

54. (New) A machine according to claim 53, wherein the first rear support and front supports are maintained in a tangential orientation with respect to a turning radius extending from said common center of steering rotation to a respective vertical steering axis of each of said steered supports.

55. (Canceled).

56. (New) A machine according to claim 48, further comprising a chassis coupled to the first rear support, and a linkage assembly connected to said chassis and configured to move said chassis between the extended and retracted positions.

57. (New) A machine according to claim 48, further comprising a chassis coupled to the first rear support, the chassis including a support plate coupled to a second actuator, the second actuator configured to move the chassis in a vertical direction.

58. (New) A machine according to claim 48, further comprising a chasis coupled to the first rear support, the chassis including a support plate and a yoke member, the yoke member being rotatable relative to said support plate.

59. (New) A machine according to claim 58, wherein the first actuator is coupled between the support plate and the yoke member to steer the first rear support.

60. (New) A machine according to claim 59, further including a second actuator coupled between the frame and the first rear support, and the yoke member including a vertical rotation axis offset from a vertical axis of the second actuator.

61. (New) A machine according to claim 48, further including:  
a first valve configured to supply hydraulic fluid to the front actuator;  
a second valve controlled by said steering system and configured to supply hydraulic fluid to the rear actuator;  
a first position detector cooperating with said front actuator;  
a second position detector cooperating with said rear actuator;  
the electronic control unit cooperating with the steering system and configured to operate said rear actuator in response to the steering of the first and second front supports; and  
the electronic control unit electrically coupled to said first and second position detectors, to a third position detector configured to determine whether the first rear support is in the retracted position, and to the first and second valves.

62-70. (Cancelled).

71. (New) A steerable machine for breaking up ground comprising:

a frame;

at least one pair of rollable front supports and at least one pair of rollable rear supports, each of said front and rear supports including a chassis secured to the frame and said each of the front supports being rotatable about a front vertical axis and at least one of the rear supports being pivotable about a first rear vertical axis;

said chassis includes a yoke that supports said rear support, and has a vertical pivot journal coupled to revolve on a support plate fixed to an end of a second actuator;

said second actuator comprises a second hydraulic jack set with a vertical axis, which has a second rod with a second rod end fixed to said plate and a second cylinder end, wherein said rod slides, integral with said frame;

the cylinder of said second hydraulic jack is an integral part of said frame being connected thereto by means of a first articulation for moving said chassis with respect to a fixed point on said frame in order to move the rear support inward of said frame;

at least one driver's cab located in said frame;

a means for breaking up the ground connected to said frame;

traction means supported by said frame for rotating at least one of said rollable supports;

at least one first actuator operatively coupled to at least one rear support;  
a steering system accessible from said driver's cab for operating the first  
actuator for rotating at least one of said rear supports about a second rear vertical axis  
while turning the front supports of the machine.

72. (New) A machine according to claim 71, wherein the steering system  
further includes a third hydraulic actuator configured to steer at least one of the front  
supports, and an electronic control unit configured to coordinate movement of the at  
least the first and second hydraulic actuators.

73. (New) A machine according to claim 71, wherein the steering system  
further includes a first position detector operatively coupled to at least one of the front  
supports, a second position detector operatively coupled to at least one of the rear  
supports, and an electronic control unit configured to electronically communicate with  
each of the first and second position detectors.

74. (New) A machine according to claim 73, wherein the steering system  
further includes a third position detector configured to determine whether the pivotable  
rear support is in the retracted position, the third position detector including a travel  
switch.

75. (New) A machine according to claim 71, wherein the pivotable rear  
support is steerable in both the extended and retracted positions.

76. (Amended) A machine according to claim 71, wherein the steering system is configured to selectively steer the pair of rear supports.

77. (New) A steerable machine for breaking up ground comprising:  
a frame;  
at least one pair of rollable front supports, said front supports being  
rotatable about a front vertical axis and front steering means controlled by power  
steering for steering said front supports;  
at least one pair of rollable rear supports, at least one of said rear  
supports being pivotable about a rear vertical axis and rear steering means controlled  
by at least one steering hydraulic cylinder for steering said pivotable rear support;  
at least one driver's cab located in said frame;  
a means for breaking up the ground connected to said frame;  
traction means supported by said frame for rotating at least one of said  
rollable supports;  
a steering system accessible from said driver's cab for operating said front  
steering means and said rear steering means at the same time, from said driver's cab,  
the steering system including a manual steering input device.

78. (New) A machine according to claim 77, wherein the front steering means includes at least one front steering hydraulic cylinder configured to steer at least one of the front supports, and the machine further including an electronic control unit



configured to coordinate movement of the rear steering hydraulic cylinder and front steering hydraulic cylinder.

79. (New) A machine according to claim 77, wherein the maneuvering system further includes a first position detector operatively coupled to at least one of the front supports, a second position detector operatively coupled to at least the pivotable rear support, and an electronic control unit configured to electronically communicate with each of the first and second position detectors.

80. (New) A machine according to claim 79, wherein the maneuvering system further includes a third position detector configured to determine whether the pivotable rear support is in the retracted position, the third position detector including a microswitch.

81. (New) A machine according to claim 77, wherein the pivotable rear support is steerable in both the extended and retracted positions.

82. (New) A machine according to claim 77, wherein the pivotable rear support is steerable according to a calculated geometry with respect to a common center of steering rotation of the front supports.

83. (New) A machine according to claim 82, wherein the pivotable rear support and front supports are maintained in a tangential orientation with respect to a

turning radius extending from said common center of steering rotation to a respective vertical steering axis of each of said steered supports.

84. (Canceled).

85. (New) A machine according to claim 77, further comprising a chasis coupled to the pivotable rear support, the chassis including a support plate and a yoke member, the yoke member being rotatable relative to said support plate.

86. (New) A machine according to claim 85, wherein the steering hydraulic cylinder is coupled between the support plate and the yoke member to steer the pivotable rear support.

87. (New) A machine according to claim 1, the actuator is movable in response to said maneuvering system and to a position signal indicating that said at least one rear supports is located inward of the frame.

88. (New) A machine according to claim 48, wherein the first rear support is located inside the frame when in the retracted position.

89. (New) A machine according to claim 48, wherein the first rear support includes a fixed member and a yoke member, the yoke member being rotatable relative to the fixed member.

90. (New) A machine according to claim 89, wherein the fixed member is fixed to a rod end of a vertical hydraulic actuator and the rear hydraulic actuator is coupled between the fixed member and the yoke member to steer the first rear support.

91. (New) A machine according to claim 48, wherein the first rear support is steerable about a vertical steering axis in response to said steering system and to a position signal indicating that the first rear support is in the retracted position.

92. (New) A machine according to claim 91, wherein a position detector provides the position signal, the position detector including a microswitch.

93. (New) A machine according to claim 91, wherein the first rear support is steerable according to a calculated geometry with respect to a common center of steering rotation of the front supports.

94. (New) A machine according to claim 91, further including a chassis supporting the first rear support and a first articulation connected to said chassis and adapted to move said chassis between the extended and retracted positions of the first rear support.

95. (New) A machine according to claim 94, wherein said chassis includes a support plate being connected to a second rear actuator adapted to move said chassis

in a vertical direction along a vertical axis, said second rear actuator being connected to said frame via said first articulation.

96. (New) A machine according to claim 95, wherein said second rear actuator includes a hydraulic actuator having a cylinder connected to said frame by means of said first articulation.

97. (New) A machine according to claim 94, further including respective chasses of the front supports which are interlinked by means of a second articulation, at least one of said chasses cooperating with a third actuator adapted to rotate said chassis around a vertical axis.

98. (New) A machine according to claim 59, wherein the first rear support includes a support column and the yoke member includes a vertical rotation axis offset from a vertical axis of the support column.

99 -100. (Cancelled).

101. (New) A machine according to claim 77, wherein the pivotable rear support includes a fixed member and a yoke member, the yoke member being rotatable relative to the fixed member.

102. (New) A machine according to claim 101, wherein the fixed member is fixed to a rod end of a vertical hydraulic actuator and the rear steering hydraulic cylinder is coupled between the fixed member and the yoke member to steer the pivotable rear support.

103. (New) A machine for breaking up ground comprising:  
a frame;  
at least a first and second rollable front support;  
at least a first and second rollable rear support, at least the first rear support being pivotable about a vertical axis between a retracted position and an extended position with respect to the frame;  
at least one driver's cab located in said frame;  
a ground breaking device coupled to the frame and configured to contact the ground;  
a traction system coupled to the frame and configured to rotate at least one of said rollable supports; and  
a steering system controllable from said driver's cab and configured to selectively steer the front supports and at least the first rear support at the same time,  
the steering system including  
at least one rear hydraulic actuator configured to steer the first rear support,  
at least one front hydraulic actuator configured to steer at least one of the first and second front supports, and

a control circuit configured to coordinate movement of the at least one rear and at least one front hydraulic actuators.

104. (New) A machine according to claim 103, wherein the control circuit includes a pressurized oil distribution circuit.

105. (New) A machine according to claim 104, wherein the control circuit further includes an electronic control unit and a plurality of position detectors connected to the electronic control unit for sensing a position of at least one of the first and second front supports, and the first rear support.

106. (New) A machine according to claim 103, wherein the control circuit includes a position detector configured to determine whether the first rear support is in the retracted position.

107. (New) A steerable machine for breaking up ground comprising:  
a frame;  
at least one rollable front support, said front support being rotatable about a front vertical axis and a front steering assembly controlled by power steering having at least one steering hydraulic cylinder for steering said front support;  
at least one pair of rollable rear supports, at least one of said rear supports being pivotable about a rear vertical axis and a rear steering assembly having at least one steering hydraulic cylinder for steering said pivotable rear support;

at least one driver's cab located in said frame;  
a means for breaking up the ground connected to said frame;  
traction assembly supported by said frame for rotating at least one of said  
rollable supports; and  
a steering system accessible from said driver's cab for operating said front  
steering assembly and said rear steering assembly at the same time, from said driver's  
cab.

108. (New) A machine according to claim 107, wherein the pivotable rear  
support is steerable about a vertical steering axis in response to said steering system  
and to a position signal indicating a pivoting position of the pivotable rear support.

109. (New) A machine according to claim 108, wherein a position detector  
provides the position signal, the position detector including a microswitch.

110. (New) A machine according to claim 108, wherein the pivotable rear  
support is steerable according to a calculated geometry with respect to a common  
center of steering rotation of the at least one front support.

111. (New) A machine according to claim 108, further including a chassis  
supporting the pivotable rear support and a first articulation connected to said chassis  
and adapted to pivot said chassis between an extended position and a retracted  
position.

112. (New) A machine according to claim 111, wherein said chassis includes a support plate being connected to an actuator adapted to move said chassis in a vertical direction along a vertical axis, said actuator being connected to said frame via said first articulation.

113. (New) A machine according to claim 112, wherein said actuator includes a hydraulic actuator having a cylinder connected to said frame by means of said first articulation.

114. (New) A machine according to claim 111, further including a chassis of the front support that is interlinked by means of a second articulation, said front chassis cooperating with the at least one front steering hydraulic cylinder to rotate said chassis around a vertical axis.

115. (New) The machine according to claim 1, wherein:  
only one of the rear supports is configured to move inward of said frame and is  
configured to be rotatable about the rear vertical axis only when positioned inward of  
said frame.

116. (New) The steerable machine for breaking up ground as claimed in claim  
9, wherein:  
only one of said rear supports is pivotable about the rear vertical axis;



the pivotable rear support is pivotable between an extended position and a retracted position; and

the pivotable rear support is steerable only when in said retracted position.

117. (New) A machine according to claim 48, wherein only the first rear support is pivotable about a vertical axis and the first rear support is selectively steerable at the same time with the front supports only when the first rear support is in a retracted position.

118. (New) A machine according to claim 71, wherein:  
only one of the rear supports is pivotable about the first rear vertical axis; and  
the steering system is configured to rotate the pivotable one of the rear supports about the second rear vertical axis only when the pivotable one of the rear supports is moved inward of said frame.

119. (New) A machine according to claim 77, wherein:  
only one of said rear supports is pivotable about the rear vertical axis;  
said pivotable rear support is pivotable between an extended position and a retracted position; and  
said pivotable rear support is steerable only when in said retracted position.

120. (New) A machine according to claim 103, wherein only the first rear support is pivotable about a vertical axis and the first rear support is selectively

steerable at the same time with the front supports only when the first rear support is in a retracted position.

121. (New) A machine according to claim 107, wherein:  
only one of said rear supports is pivotable about the rear vertical axis;  
said pivotable rear support is pivotable between an extended position and a retracted  
position; and  
said pivotable rear support is steerable only when in said retracted position.